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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/307,443 05/10/99 RUELKE

C CM02872J

EXAMINER

MM91/0518

LEE, B

MOTOROLA INC
INTELLECTUAL PROPERTY LAW SECTION
8000 WEST SUNRISE BOULEVARD
FORT LAUDERDALE FL 33322

ART UNIT

PAPER NUMBER

2817

DATE MAILED:

05/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

09/307443



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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER NUMBER
	5

DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined ☒ Responsive to communication filed on 12 Feb 2001 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 12/31 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474 | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-31 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☒ Claims 1 are allowed.
4. ☒ Claims 2, 3, 4-11, 12-24, 25-29, 30, 31 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. These drawings are: ☐ acceptable; ☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☒ The proposed drawing correction, filed 12 Feb 2001, has been ☒ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

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DETAILED ACTION

The disclosure is objected to because of the following informalities: Note that the proposed amendment to page 3, line 13 does not appear to conform to the wording thereat and has not been entered. Note that the proposed amendment to "page 3, line 14" have been entered at --page 3, line 11-- such as to conform to the wording thereat. Moreover, note that such amendments now rendered the wording at page 3, line 11 inconsistent (e.g. p 3, l. 12 now begins an incomplete sentence, etc). Clarification is needed. Note that in the fourth line of the insert to "page 3, line 14" (entered at page 3, line 11), note that "filed" should correctly be --field--.

Page 4, note that the proposed amendments to figs. 4,5,6,7 (i.e. adding missing reference numbers) is inappropriate for the "brief description". Such added reference numbers should be added to the "detail description" of the corresponding figures. Note that the proposed amendment to "page 6, line 29" has been correctly entered at --page 6, line 30--. Appropriate correction is required.

Claims 2,3; 4-11; 12-24; 25-29; 30,31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejections under 35 U.S.C. 112, second paragraph, as set forth at pages 2,3,4 of the last Office action, with the exception of the claim 23 rejection, have not been adequately addressed by applicant in the last response. Accordingly, these objections have been repeated (see attached appendix) and applicant is required to address these issues in the next response.

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 30,31 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Peter (of record) for reasons of record.

Applicant's arguments filed 12 February 2001 have been fully considered but they are not persuasive.

With respect to the rejection of claims 30,31 on prior art grounds, applicant has asserted that the reference fails to disclose "secondary structures" that are connected to the "helix" as recited in claim 30.

Contrary to applicant's assertion, the examiner has indeed pointed out that a plurality of "secondary" structures are indeed connected to the helix. In particular, the examiner pointed out that the impedance matching structures at ends of the helix correspond to applicant's claimed "secondary structures" in the broadest sense. It should be noted that the secondary structures as recited in claim 30 do not limit where and how these structures should be connected to the helix (e.g. at the ends of the helix). Contrast the claim 30 recitation to that of claim 1 where the secondary structure are plates embedded in the helix.

With respect to the outstanding 112 second paragraph issues, applicant has given a brief description of each claim which had been rejected. However, such brief descriptions do not indicate how the particular claim, whether amended or not, overcame the particular 112 rejection.

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Accordingly, these rejection under 35 U.S.C. 112 remain rejected (except for claim 23) for reasons of record.

Claims 2,3; 4-11; 12-24; 25-29 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claim 1 is allowable over the prior art of record.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number (703) 308 4902.


BENNY T. LEE
PRIMARY EXAMINER
ART UNIT 2817

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The disclosure is objected to because of the following informalities: Page 5, line 1, note that "closely wound helical" appears to be an incomplete recitation (i.e. "~~helical~~" what?). Page 6, line 5, note that ~~--capacitor--~~ should be inserted prior to "304" and ~~--resistor--~~ should be inserted prior to "305"; line 6, note that "note" should be correctly rewritten as ~~--not--~~; line 30, note that ~~--by the arrow--~~ should follow "indicated". Page 9, line 32, note that ~~--such as capacitor--~~ should be inserted prior to "805" and ~~--resistor--~~ should be inserted prior to "806".

Appropriate correction is required.

The disclosure is objected to because of the following informalities: Note that the following reference labels appearing in the correspondingly cited figure need to be explicitly described in the specification's description thereof: fig. 2 (~~(j)~~); figs. 4, 5, 6 (1, 2, 3, 4); figs 4, 6 (Z); fig. 7 (701, 702, 703, 704).

Appropriate correction is required.

The drawings are objected to because in fig. 3, note that "stripline 301" does not appear to be properly cross-hatched as a conductive material. Correction is required.

Claims 2, 3; 4-11; 12-24; 25-29; 30, 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims ~~2, 3~~, note that recitation "at least one ~~▲~~ forward coupler, and at least one reverse coupler" is vague and indefinite as to the relationship of these features relative to the claimed "device". Clarification is needed.

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In claim 4, note that the recitation “for coupling radio frequency (RF) energy²¹” appears incomplete (i.e. coupling RF energy to where?), thus rendering this aspect vague and indefinite. Similarly, note that “for providing isolation” appears to be an incomplete recitation (i.e. isolation relative to/from what?). Clarification is needed.

In claim 12, it is unclear if the recited function of the respective ground layers of “isolating” the “at least one transmission line” and the corresponding “connecting structure” is correct. If such a function is correct as recited, then it would appear that the previously recited RF coupling between the “at least one transmission lines” and the respective “connecting structure” would be prevented. Clarification²⁰ is needed. Note ^{that} ~~an~~ it is unclear which one of the “at least one transmission lines” is intended by the recited “the transmission line”.

In claim 18, note that since this claim recites the same subject matter as claim 17, from which it directly depends, this claim appears to be redundant. Clarification is needed.

In claim 20, note that it is unclear which “secondary structures” of which “plurality of connecting structures”

(i.e. first or second?) is intended by this claim.

In claim ~~23~~, note that “the plurality of plurality...” is vague in meaning.

In claim 24, note that “the third substrate” lacks strict antecedent basis.

In claim 25, note that “(above/below) plane” is vague in meaning. Moreover, it is unclear which one of the “at least one transmission lines” is intended by “the transmission line”. Note that it is unclear what relationship exists between the “at least one magnetic field coupling

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structure” and the previously recited “at least one magnetic field coupling device” (e.g. same as, different from, etc.).

In claim 30, note that it is unclear which one of the “at least one transmission lines” is intended by the recited “the transmission line”.

In claim 31, note that it is unclear whether “of variable length” is a proper characterization. Note that from the specification, that the lengths do not actually vary, but can be of different length.

The following claims have been found objectionable for reasons set forth below.

In claim 1, note that “aforementioned” should be rewritten as --said--.

In claims 1, 4, 12, note that “form” should be rewritten as --provide--.

In claim 11, note that “is” should be rewritten as --are-- to provide a consistent tense.

In claim 12, line 2, note that --applied thereto-- should follow “RF energy”; line 4, note that “on” should correctly be --one--.

In claims ~~13~~, ~~14~~, ~~15~~, ~~28~~, ~~29~~, note that --the-- should precede “first” and “second”.

In claims 15, 29, note that --a respective stripline-- appears to be the proper characterization.

In claims ~~16~~, ~~17~~, ~~18~~, note that --secondary structure-- should follow “each” and --the-- should precede “helix”.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action: